

Appl. No. : 10/728,063
Filed : December 4, 2003

REMARKS

Claims 5-17 and 19-21 remain pending in the present application, Claims 9, 10, 15, 19, and 21 having been amended.

On these pages, the deletions are [[double-bracket]] while the insertions are underlined.

Applicants submit that this application, as amended, is now in condition for allowance, and Applicants earnestly request such action. Below, Applicants address each of the Examiner's reasons for rejection.

All Claims Comply with the Requirements of § 112

Claim 21 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully traverse the present rejection. However, in order to expedite prosecution of the present application, Applicants have amended Claim 21. Applicants expressly reserve the right to further prosecute the original version of Claim 21 through continuation practice.

Page 3 of the outstanding Office Action indicates that the present specification fails to "describe in detail how the means for selecting, control lever 134, lowers engine speed during the shifting operation." However, Applicants wish to note that Claim 21 now recites "additionally comprising means for lowering engine speed during a shifting operation." Thus, Applicants submit that the present rejection is moot.

However, for the Examiner convenience, Applicants have set forth below paragraphs 0056 and 0077 of the present specification which clearly disclose means for lowering engine speed during a shifting operation, as follows:

[0056] In the embodiment, during a shifting operation, the ECU 153 can lower the engine idle speed to allow the operator to comfortably operate the watercraft 30 between a neutral and forward or a neutral and reverse operation. When the operator has finished performing a shifting operation, the ECU 153 can raise the engine idle to increase idling thrust. A throttle position sensor (not shown) allows the ECU to determine the position of the throttle and therefore the position of the control lever 134.

[0077] At operation block P30, the control routine lowers the engine idle speed from the high idle speed to a low idle speed during a shifting operation. The lower engine speed during shifting allows the operator to shift the thrust bucket smoothly from the neutral position to either the forward position or a reverse position. The control routine 300 then moves to an operation block P32.

Appl. No. : 10/728,063
Filed : December 4, 2003

Thus, Applicants submit that Claim 21 is fully supported by the present specification.

Matsuda et al. Does Not Anticipate Claims 5, 6, 7, and 11

Claims 5, 6, 7, and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Matsuda et al. Applicants respectfully traverse the present rejection.

Generally, at least one of the inventions disclosed in the present application is directed to features for providing more convenience for an operator to operate a watercraft at low speeds. For example, as noted at paragraph 0048 of the present application, the “control lever 134 can have multiple positions, for example, at least two positions: a low engine idle position and a high idle position. The control lever thus establishes two different idle speeds for the engine 80. A predetermined lower engine idle speed allows the operator of the watercraft 30 to maneuver the watercraft in environments where slower movement is desired, such as when approaching a dock or a beach. A predetermined higher engine idle speed produces more water flow through the discharged nozzle 104, hence producing more thrust, to assist turning the watercraft 30 more sharply than the watercraft would turn under the thrust produced at the predetermined lower engine idle speed.”

However, this is only one example of a use for the predetermined higher engine idle speed. For example, the rider might choose to operate the watercraft at the higher predetermined engine idle speed for an extended period of time. Such an operation might be useful when driving the watercraft through a large marina or an area with extended no-wake zones. Thus, the control lever can be actuatable between the first and second positions independently of a steering condition of the watercraft. This allows the operator to choose when to trigger the elevated idle speed mode.

The Matsuda et al. reference discloses a jet propulsion watercraft that can maintain steering capability even during a throttle-closed operation. The watercraft includes a push-pull cable provided between a rotational shaft of the steering handle and a throttle lever. For example, as shown in Figures 4A and 4B of the Matsuda et al. reference, the throttle Lt can move between two positions by movement of the steering shaft 30. The specification of the Matsuda et al. reference indicates that the second elevated engine speed position of the throttle lever Lt is achieved through the following action:

As shown in Fig. 4A, when the handle is steered to the left, the inner wire of the push-pull cable 31A on the left side is pushed into the corresponding outer

Appl. No. : 10/728,063
Filed : December 4, 2003

cable cover, while the inner wire of the push-pull cable 31B on the opposite side (right side) is pulled out of the corresponding outer cable cover....to cause the throttle lever Lt to be swung toward an open side....as should be appreciated, when the handle 10 is fully steered to the right or the left, the throttle lever Lt is rotated toward the open direction.... Therefore, even if the throttle close operation is being performed, the throttle can be forcibly opened, thereby allowing the steering to be maintained (steering assist mode control).

Matsuda et al. col. 8, ll. 40-53, Col. 9, ll. 4-11.

Nowhere does the Matsuda et al. reference include a teaching that the throttle lever Lt can be selectively positioned in first and second positions independently of a steering condition of the watercraft. Rather, the disk 30 or the pins 33A, 33B of Matsuda et al. are only actuatable by **turning the handlebars**. (See Matsuda et al., Col. 9, ll. 4-20.

In contrast, Claim 5 recites, among other recitations, a “watercraft comprising a hull, an engine being supported by the hull and including at least one throttle, a jet propulsion unit driven by the engine, the jet propulsion unit comprising a steering nozzle configured to direct a jet of water exiting the jet propulsion unit, a throttle actuator mechanism coupled with the throttle, and a control lever cooperating with the throttle actuator mechanism, the control lever being selectively positioned in at least first and second positions, the control lever being actuatable to assume either of the first and second positions independently of a steering condition of the watercraft, the first position of the control lever being arranged such that the throttle actuator mechanism rests in a first position and the second position of the control lever being arranged such that the throttle actuator mechanism rests in a second position, the throttle having a first position when the throttle actuator mechanism rests in its first position and having a second position when the throttle actuator mechanism rests in the second position, wherein the second throttle position provides a larger opening degree than the first throttle position.”

Nothing in the Matsuda et al. reference teaches that the throttle lever Lt can be actuatable to assume either of the first and second positions independently of the steering condition of the watercraft. Rather, when the handlebars 10 of the watercraft taught by Matsuda et al. are turned, the throttle lever Lt assumes the position shown in Figure 4A. Nothing in the Matsuda et al. reference teaches that the throttle lever can be moved to the position illustrated in 4B when the handlebars are turned. Rather, the Matsuda et al. reference teaches that the throttle lever Lt cannot assume the position shown in 4B when the handlebars are turned.

Appl. No. : 10/728,063
Filed : December 4, 2003

Applicants recognize that the Examiner has explained that it is believed that the Matsuda et al. reference teaches this feature because the “lever can be manipulated by hand if in the position shown in Figure 4B to assume either of the first and second positions independently of a steering condition of the watercraft.” Page 7 of the outstanding Office Action.

However, as noted above, when the handlebars 10 of the watercraft of Matsuda et al. are turned, the throttle lever Lt cannot be moved to the position shown in Figure 4B. Thus, Applicants submit that Matsuda et al. does not teach that the throttle lever can assume the two recited positions **independently** of the steering position of the watercraft. Applicants thus submit that Claim 5 clearly and nonobviously defines over the Matsuda et al. reference.

Additionally, Applicants submit that Claims 6, 7, and 11 also define over the Matsuda et al. reference, not only because they depend from Claim 5, but also on their own merit.

Kleeman et al. Does Not Anticipate Claims 15 or 16

Claims 15 and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kleeman et al. Applicants respectfully traverse the present rejection. However, in order to expedite prosecution of the present application, Applicants have amended Claim 16. Applicants expressly reserve the right to further prosecute the original versions of Claims 15 and 16 through continuation practice.

Kleeman et al. teaches a throttle cable adjustment mechanism which incorporates a manually-turnable screw for making fine adjustments to the idle speed of an engine. However, Kleeman et al. does not teach a system or mechanism for allowing a user to switch a throttle mechanism between first and second predetermined throttle resting positions. Rather, Kleeman et al. only teach allowing a user to turn a screw, thereby providing essentially infinite adjustments, to gradually change the idle speed of an engine.

In contrast, Claim 15 now recites, among other recitations, a “method of controlling an engine speed of a marine engine that powers a propulsion unit of a watercraft, the method comprising selecting between a first predetermined throttle resting position and a second predetermined throttle resting position depending upon a desired operational mode of the watercraft . . . the step of selecting between the first throttle resting position and the second throttle resting position being independent of a steering condition of the watercraft.”

Appl. No. : 10/728,063
Filed : December 4, 2003

By selecting between two predetermined throttle resting positions, the users of such a method can conveniently switch between at least two different low speed cruising and or turning modes. This is particularly advantageous in the context of small jet-powered watercraft, such as, for example, but without limitation, boats known as personal watercraft. When cruising on such watercraft, low speed maneuvers, such as those in marinas and other low or no-wake zones, requires the user to use a very light touch on the throttle lever. Additionally, depending on the idle speed of the particular watercraft, steering actions also require small throttle movements. Such small or long sustained light throttle conditions can cause hand fatigue. Thus, by providing a method for selecting between at least two different predetermined throttle resting positions, a rider can more easily switch between low speed modes, and reduce hand fatigue.

As noted above, Kleeman et al. fails to teach a system or method providing the selection between at least two predetermined throttle resting positions. Rather, Kleeman et al. only teaches an infinitely adjustable system.

Applicants thus submit that Claim 15 clearly and non-obviously defines over the Kleeman et al. reference. Additionally, Applicants submit that Claim 16 also defines over the Kleeman et al. reference, not only because it depends from Claim 15, but also on its own merit.

Irgens et al. Does Not Anticipate Claims 19-21

Claims 19-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Irgens et al. Applicants respectfully traverse the present rejection. However, in order to expedite prosecution of the present application, Applicants have amended Claim 19. Applicants expressly reserve the right to further prosecute the original versions of Claims 19-21 through continuation practice.

Irgens et al. teaches an idle speed control lever for an outboard motor-powered boat. The Irgens et al. system includes a first main throttle lever 23 and a second throttle lever 43 for making idle speed adjustments to the engine. However, as shown in the Irgens et al. reference, the second throttle lever 43 is infinitely adjustable and thus does not provide the ability to switch between two predetermined throttle resting positions.

In contrast, Claim 19 now recites, among other recitations, a “A watercraft comprising a hull, an engine supported by the hull, the engine comprising a throttle, a means for selecting between at least a first and a second predetermined resting positions for the throttle . . . wherein

Appl. No. : **10/728,063**
Filed : **December 4, 2003**

the means for selecting is operable to select between the first and second resting positions at least while the engine is acting to propel the watercraft in a forward direction.”

As noted above, by providing for the selection between two predetermined throttle resting positions, the users of such a watercraft can conveniently switch between at least two different low speed cruising and or turning modes. This is particularly advantageous in the context of small jet-powered watercraft, such as, for example, but without limitation, boats known as personal watercraft.

As noted above, Irgens et al. fails to teach a system or method providing the selection between at least two predetermined throttle resting positions. Rather, Irgens et al. only teaches an infinitely adjustable system.

Applicants thus submit that Claim 19 clearly and non-obviously defines over the Kleeman et al. reference. Additionally, Applicants submit that Claims 20-21 also define over the Irgens et al. reference, not only because they depend from Claim 19, but also on their own merit.

The Proposed Combination of Kleeman et al/Powers Does Not Make Claim 17 Obvious

Claim 17 stands rejected under 35 U.S.C. § 103(a) as being obvious over Kleeman et al. in view of Powers. Applicants respectfully traverse the present rejection. However, as noted above Applicant submits that Claim 15 defines over the cited references. Thus, Applicants submit that Claim 17 also defines over the cited references, not only because it depends from Claim 15, but also on its own merit.

CONCLUSION

For the reasons presented above, Applicants respectfully submit that this application, as amended, is in condition for allowance. If there is any further hindrance to allowance of the pending claims, Applicants invite the Examiner to contact the undersigned.

Appl. No. : 10/728,063
Filed : December 4, 2003

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: October 20, 2005

By:

Michael A. Giuliana
Registration No. 42,611
Attorney of Record
Customer No. 20,995
(949) 760-0404

2008414_1
102005